

REMARKS

In this office action the Examiner objected to the title of the invention as not being descriptive and required a new title that is clearly indicative of the invention to which the claims are directed.

Applicant has submitted a new title which is more descriptive of the invention. Therefore, Applicant respectfully requests that the Examiner withdraw the objection to the title.

The Examiner also objected to the abstract because it is written in the format of a claim and required correction.

Applicant has amended the Abstract to remove the claim format of the Abstract. Therefore, Applicant respectfully requests that the Examiner withdraw the objection to the Abstract.

Further in the office action the Examiner rejected claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Matthews et al. in view of Dickhart III et al. To support the rejection the Examiner stated,

"Matthews et al. show a commonplace range spring 20, see figure 1.

The claimed invention differs from Matthews et al. only in the inclusion of damping means on the spring.

Dickhart et al. show a brake spring having a damper 32, 36.

It would have been obvious to one of ordinary skill in the art to have utilized a damper on the spring of Matthews et al.

in view of the teaching of Dickhart et al so as to reduce vibrations.

Re. claim 2, the damper is a predetermined size.

Re claims 3-5, the type of material would have been deemed a mere matter of choice dependent upon the desired damping rate.

Re claim 6, Matthews et al show a diaphragm (see fig. 1).

Re claim 7, Dickhart et al show dampers on both ends of the springs.

Re claims 8-14, note the above discussion.

Re claims 15-20, note the plurality of elements in the embodiment shown in figure 8 of Dickhart et al. Note that at least 3 elements are shown."

Applicant must disagree with the Examiner's interpretation of Dickhart et al. wherein the Examiner states that Dickhart shows a brake spring having a damper 32, 36. According to Dickhart et al. 32 is a cup element which includes damping member 36. Further, Dickhart et al. also shows a cup member 34 with a damping member 38 on the opposite end of the spring. Cup members 32 and 34 are used to contain the damping member or members. Dickhart et al. describes the invention as "The embodiment illustrated involves a constrained damping material, which may be made of elastomeric, fibrous or leather like material." And further Dickhart et al. states, "An advantage of the double damping arrangement is that the damping material 18 provides isolation between the spring 10 and the car body 12 and the member or material 24 provides isolation between the truck 14

and the spring 10." (Column 2, lines 17-21 and lines 24-28). Although the word used by Dickhart et al. is "contrained", Applicant believes it is a misprint and should be "contained" or "constrained". Since the material used for the damping, as taught by Dickhart et al. is a fibrous or elastomeric material it appears that it is necessary to enclose the material as is shown in Figures 1 and 2.

The damping device of Dickhart et al. is designed to dampen the oscillation of a coil spring that is disposed between a railway car body and a truck. This is hardly comparable to a range spring that is disposed within a brake valve to provide a mechanical force against a diaphragm in order to generate air pressure in the valve. It would be difficult to understand how the cup members that are used to contain the damping member, as taught by Dickhart et al., could be used in conjunction with the brake valve as shown in Matthews et al.

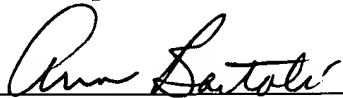
Therefore, Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Matthews et al. in view of Dickhart III et al.

In view of the discussion supra, it is believed that the invention as described in claims 1-20 is patentable and that this application is now in condition for allowance and such allowance by the Examiner is respectfully requested.

In the event the Examiner has further difficulties with the examination and/or allowance of the application, the Examiner is

invited to contact the undersigned agent for applicant by
telephone at (412) 380-0725, if necessary, to resolve any
remaining questions or issues by interview and/or Examiner's
Amendment as to any matter.

Respectfully submitted,
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Appendix A

In the Specification:

Please replace the title "LOCOMOTIVE BRAKE VALVE" with the following:

LOCOMOTIVE BRAKE VALVE EQUIPPED WITH A RANGE SPRING DAMPENER

Please replace the Abstract of the Disclosure with the following:

ABSTRACT OF THE INVENTION

In combination with a railway locomotive brake valve having at least one exhaust valve assembly, at least one spring housing and at least one range spring, the improvement comprising a device for providing enhanced damping capabilities, whereby the device will minimize spring oscillation during operation of the locomotive brake valve.